

DESCRIPTIONS OF THE PREPARATORY STAGES OF ENNOMOS ALNIARIA (*Linn.*).

By WM. BEUTENMÜLLER.

Egg.—Oblong, flattened above and below, shining, smooth, olive brown with a large white spot on the side which is truncate and where the young larva escapes; at the other end it is slightly rounded; sides almost parallel. Length 1 mm.; width .5 mm. Laid October 6, 1892, in chain-like rows, one egg against the other; emerged April 7, 1893.

Young Larva.—Length 3 mm. Head testaceous, body above dull green; below the spiracles and under side yellowish, translucent; as the larva grows older it is wholly pale green. Length 8 mm. Moulded April 29th.

After first moult.—Entirely pale green, without any visible markings whatever, smooth and somewhat shining. Length 13 mm. Moulded May 6th.

After second moult.—Green as in the previous stage; apparently no change, except that the junctions of the segments are yellow. Length 16 mm. Moulded May 15th.

After third moult.—Not much different from the last stage. The body beneath is quite flattened and the lateral edge is ridged beneath the spiracles. The head is also much flattened and projects forward. Length 22 mm. Moulded May 24th.

After fourth moult. Green; thoracic feet brownish, antennæ rather long, pinkish; beyond the middle of the fifth segment is a transverse fold or ridge, which is brown in some individuals and on the eighth and eleventh are two small tubercles, the summits of which in some individuals are brown. On each segment along the dorsum are two minute piliferous spots, which are hardly visible without a lens. On the eleventh and twelfth segments are a few short yellowish hairs. The pair of abdominal legs on the ninth segment brown outside (no other abdominal legs present). Anal legs pinkish at extremities. Beneath, there is a pair of tubercles on the sixth segment. The minute tubercles are also present. Length 27 mm. Moulded June 4th.

After fifth moult.—The fifth segment above is now much more swollen into a transverse ridge and a corresponding one on the sixth segment beneath, but which is not quite so prominent. The two first pair of thoracic feet project forward and are pressed to the body, while the last pair rest on the twig. On the eighth segment is also a trans-

verse swollen ridge. The tenth to twelfth segments inclusive are dull green, mottled with brown spots, and on the dorsum of the eleventh segment are two brown spots. The body is bright green, with the junctions of the segments yellow. Length 65 mm. Moulded June 15th.

Fully-grown Larva.—The body is now dull dirty green instead of bright green, and mottled with greenish ochreous. The head is comparatively small, and the first segment is about equal the width, the remaining segments gradually increasing in size. The thoracic feet have the bases considerably swollen and ringed with ochraceous. The pair of abdominal and anal legs are chocolate brown. Over the body are scattered irregularly small, elevated, pale yellowish spots, especially on the last three segments, which are conspicuously mottled. The cervical shield is dirty chocolate brown; on the second to tenth segments inclusive, are four minute black tuberculate spots; the fourth and fifth segments have an additional pair of spots. The transverse ridge on the fifth is very prominent, as is also the one on the underside of the sixth segment and the one on the eighth segment, and the two black tuberculate spots on the dorsum of the eleventh segment. Underside of body same as above, except the last three segments pale whitish-green. Anal plates tinged with lilac. Length 110 mm.

When fully fed the larva spins a loose thin double cocoon between leaves. The cocoon is an ovate elongated whitish web, and is open on each end. The pupa is pinkish white, roughened on all the segments, but the spaces between are semitransparent and yellowish. The pupa is also covered with a mealy substance. Length, 35 mm.; cocoon, 40 mm.

Food-Plants : Elm, Maple, Sweet gum, etc.

NOTE ON HYPERCHIRIA IO VAR. LILITH.

By WM. BEUTENMULLER.

About three years ago, early in April, I received two half-grown larvæ of *H. lilith*, from Mrs. A. T. Slosson, who obtained them in Florida from eggs laid by this form. The larvæ were fed on dried bay leaves, softened in hot water, it being too early in the season to obtain fresh food. I offered them this food and also a species of *Myrica* which I brought with me from Florida in 1887. The larvæ only nibbled these leaves, and as a consequence they just about managed to keep alive, and their growth was very much retarded. After existing